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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/990,048	11/20/2001	Donald Spector	F.11168-1	1437

27957 7590 07/22/2003

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EXAMINER

CHRISTMAN, KATHLEEN M

ART UNIT	PAPER NUMBER
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3713

3

DATE MAILED: 07/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

N.K.

<b>Office Action Summary</b>	Application No. 09/990,048	Applicant(s) SPECTOR, DONALD	
	Examiner Kathleen M Christman	Art Unit 3713	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_ .
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
     If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_ .  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
     a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |                                                                                               |                                                                             |
|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                   | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)          | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ . | 6) <input type="checkbox"/> Other: ____                                     |

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## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the system of claims 1 and 12 including question analysis and response components must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 recites the limitation "the vertical learning system" in step b; claim 5 recites the limitation "said virtual system learning environment"; claim 6 recites the limitation "the educational progress"; claim 10 recites the limitations "said audible or video information" and "the questions"; claim 11 recites the limitations "the components" and "the specific answer" in step c. There is insufficient antecedent basis for this limitation in the claim. Claim 3 recites the limitation that "said information generated by said user includes video information" it is unclear how the user generates this information. Claim 11 recites the limitation "whereby certain words and their sequence prompt the computer to scan the library to find a specific answer most closely related to the in the inquiry and when a match is found, audibly presented to

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answer to the child". This limitation is generally confusing and unclear. Claims 2, 4, 7-9 and 12-16 are rejected for their incorporation of one or more of the above through their dependencies.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-6, 10, 11, 15, and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Ho et al (US 6501937 B1). Ho et al teaches a learning system which includes one or more input devices for effecting interactive communications with the learning system, and a video display terminal for graphical depiction of the system response to the input devices, wherein the interactive communication is prompted by one or more user initiated inputs, See figure 3B; the system further comprising: means for processing information generated by a user of the virtual learning system, means for displaying on said video display terminal information generated by the "virtual" learning system in response to the information generated by the user, see col. 5: 43-54; means for presentation by the user in audible or video form inquiries regarding the information observed on the display terminal (specifically audible information as in claim 15), see col. 6: 3-7; an electronic library (referred to as the database by Ho et al) of answers to inquiries which commonly arise from viewing the information, see col. 5: 55-58; and means for the recognition of the user's inquiries and rendering via the output device from the library, the answer most closely related to at least some of the words and their sequence as presented in the inquiry, see col. 6: 10-14, as claimed in claim 1. The information generated by said user including audible information (claim 2) is

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taught through the use of the voice recognition input device, see col. 3: 49-50. The information generated by the user including video information (claim 3) has been interpreted to relate to the keyboard inputs of Ho et al. The virtual learning system including means to monitor the educational process of said user of said virtual learning system (claim 4) is taught at col. 3: 34-36, where the monitoring means includes means to modify said virtual learning environment based on progress of said user (claim 5), see col. 3: 38-41. The virtual learning system provides access to remotely stored educational material which may be access and displayed by said virtual learning system in response to the educational progress of said user (claim 6) is taught at col. 4: 19-20 and 28-30. The means for recognition of the user's inquiry is in word recognition (claim 16) is taught generally in Figure 2, with the specific details of the analyzer functions ranging from col. 6: 22 - col. 23: 12. Displaying a question on the screen (claim 10) is taught at col. 20: 14-19.

Regarding claim 11, Ho et al teaches a system which provides immediate audible answers to a user, regardless of age, including an electronic library (referred to as the database) associated with the components in which is digitally stored answers to commonly asked inquiries resulting from observation of images on the video display terminal, see col. 5: 55-58; and means including a voice recognition unit in the input of the computer, acting to recognize distinct words and their sequence pattern of a child (user) speaking into the unit, whereby certain words and their sequence prompt the user to scan the library to find the specific answer most closely related to the inquiry and when a match is found, audibly presented to answer to the child, see col. 3: 62-67 and col. 6: 10-14 and the specific details of the analyzers functionality as cited above. A speaker is inherent to any computer system that is capable of producing sound.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 7-9 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ho et al (US 6501937 B1) in view of Cook et al (US 5727950). Ho et al teaches all aspects of the claimed invention as shown above except a virtual image of a human appears on the video display terminal and is synchronized with the audible presentation of the answer from the electronic library (claims 7 and 12), that the virtual image is of a human teacher (claims 8 and 13) and that the teacher appears in a classroom setting (claims 9 and 14). Cook et al teaches the use of personal agent for each student. At col. 16: 31-50 Cook et al teaches that the agent is created through both audio and video reproduction, this includes the appearance of the agent on the screen of the student. The "virtual tutor", col. 10: 32-35, of Cook et al clearly shows how the agent is a teacher. Although Cook et al does not specifically state that the teacher appears in a classroom setting, Cook et al does teach that multiple different personalities and settings for the agent are available and beneficial because "It is important that communication between the student and the agent be engaging", col. 14: 17-18. As such it would be obvious to one of ordinary skill in the art to allow for the teacher to be in any setting. It would have been obvious to incorporate the agent system of Cook et al into the Ho et al Learn by questioning system so as to provide the user with an fully interactive and engaging educational experience, see Cook et al col. 5: 20-col. 6: 36.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- a. Shpiro (US 2002/0150869 A1) teaches a system which includes the ability for a student to ask a question and get an audible response
  - b. Ho et al (US 6336029 B1) related to the above cited Ho et al patent


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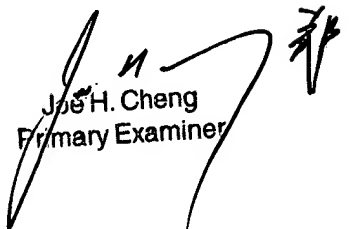
- c. James et al (US 5864844) teaches a system which includes video images of a human that are synchronized with the playing of audible answers to questions asked by the user
- d. Gasper (US 4884972) teaches a method of synchronizing a virtual characters animations with sound, also includes an educational method incorporating the animated character

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kathleen M Christman whose telephone number is (703) 308-6374. The examiner can normally be reached on M-F 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Valencia Martin-Wallace can be reached on (703) 308-4119. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9302 for regular communications and (703) 872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

  
Kathleen M. Christman  
July 16, 2003

  
Joe H. Cheng  
Primary Examiner